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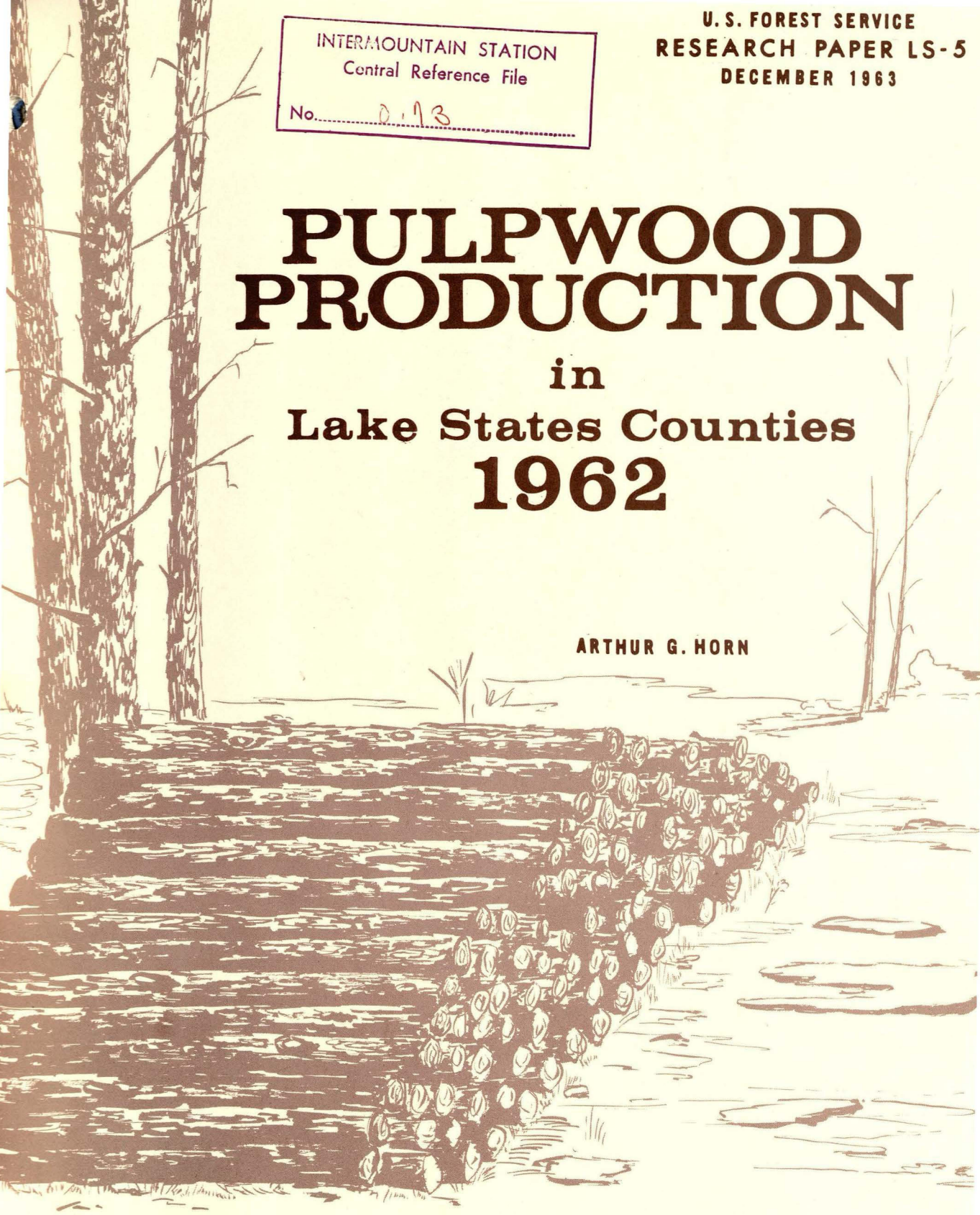
PULPWOOD PRODUCTION in Lake States Counties 1962



ARTHUR G. HORN

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M. B. Dickerman, Director

FOREST SERVICE
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PULPWOOD PRODUCTION IN LAKE STATES COUNTIES, 1962

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M. B. Dickerman, Director
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The Station is maintained in cooperation with
the University of Minnesota

Four abstract cards are included at the back
of this report for the reader's convenience.

ABOUT THIS REPORT

Timber cutting rates vary from year to year. Frequent measurement is required to maintain a current, meaningful picture of the relationships between timber cut, timber growth, and desirable cut. To partially meet this need the Station publishes summaries of the output of various timber products as often as reliable data can be accumulated. Reports of pulpwood output by States have been published each year since 1946.

This is the fourth annual report on the pulpwood harvest by counties in the Lake States Region. The 58 pulpmills using Lake States timber in 1962 furnished figures on their wood receipts by State and county of origin. Their help is gratefully acknowledged. Thanks are due also to Ray Pfeifer, Forest Survey Coordinator, Michigan Department of Conservation, for collecting data for the Michigan pulpmills.

1962 PULPWOOD BRIEFS

Lake States pulpwood harvest reaches a new high. — Pulpwood production in the Lake States was 3,342,400 cords in 1962. This was an increase of 6 percent over 1961 and slightly more than the previous all-time high recorded in 1960. Pulpwood from roundwood accounted for 98 percent of the total cut; the remaining 2 percent was in wood chips, slabs, and veneer cores. Local timber operators cut and delivered pulpwood to 58 pulpmills: 51 in the Lake States, 4 in the Central States, and 3 in Canada. Exports to Central States mills were about equally divided between roundwood and chipped wood, while exports to Canadian mills were entirely roundwood.

Receipts of miscellaneous dense hardwoods and aspen were up 11 percent and 8 percent respectively over 1961. The cut of softwoods as a group declined about 1 percent. Chipped wood and unchipped plant residues delivered to pulpmills from sawmills and other primary wood-using plants amounted to nearly 65,000 cords — an increase of 52 percent over the preceding year.

A little more than half of the pulpwood harvested from Lake States forests was cut from private lands as shown below:

	Percent of pulpwood production
National Forest	18
Other Federal	2
State	15
County	8
Private	57
Total	100

Industrial forest owners harvested nearly one-half million cords of pulpwood from their lands, about 15 percent of all pulpwood production. The cut from industrial forest lands was largest in Wisconsin with about 240,000 cords, next in Michigan with 150,000 cords, and third in Minnesota with 110,000 cords.

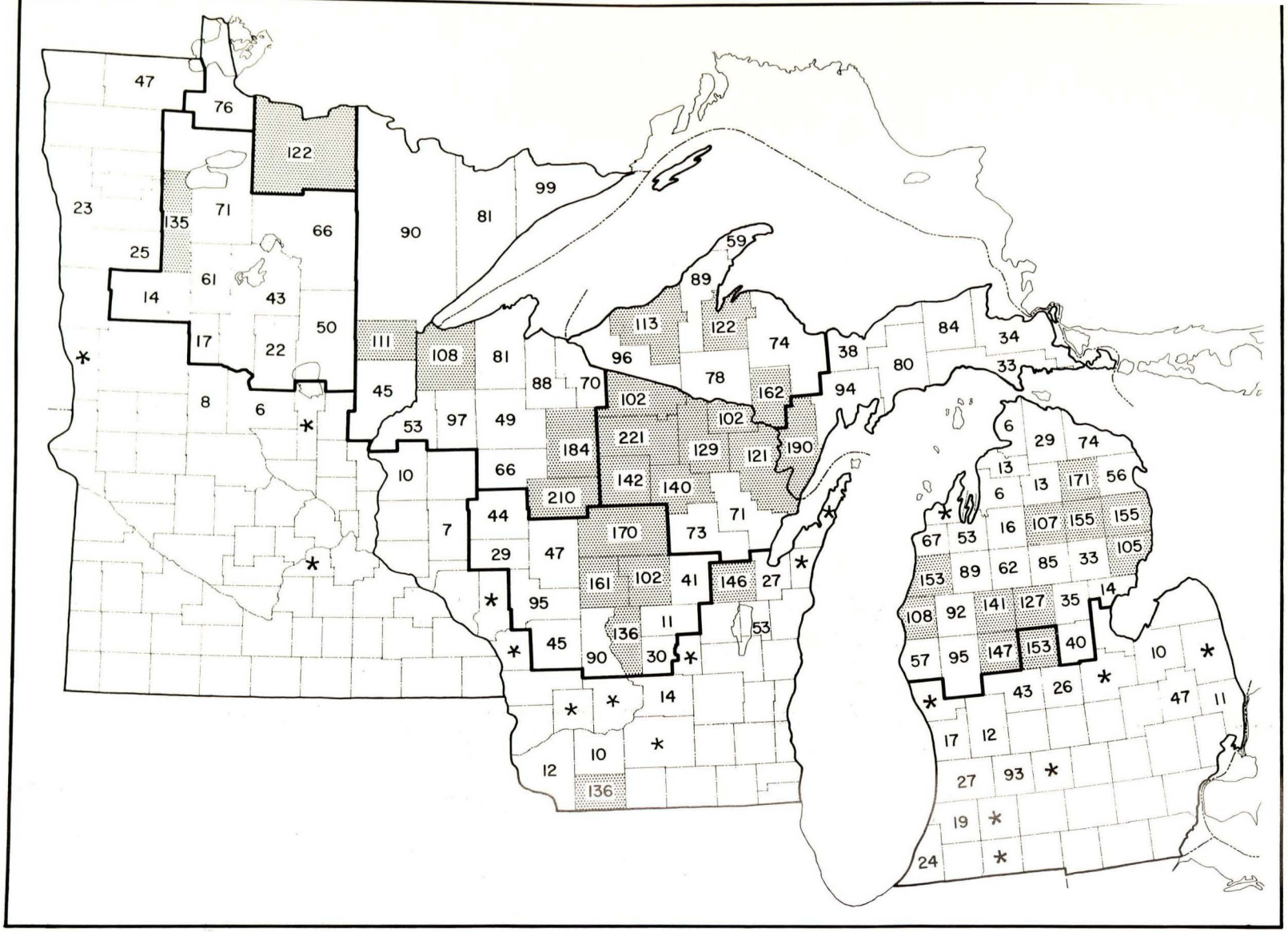
The number of mills using the different species of wood for pulping in 1962 is shown below.

Species and kind of material	Lake States	Minn.	Wis.	Mich.
Aspen	47	9	27	11
Balsam fir	30	6	19	5
Birch	13	2	9	2
Hemlock	9	—	9	—
Pine	15	6	5	4
Spruce	30	6	19	5
Tamarack	4	—	4	—
Misc. hardwoods	18	2	11	5
Wood chips (mixed species)	7	1	6	—
Slabs, etc. (mixed species	2	—	2	—
Total mills	51	10	29	12

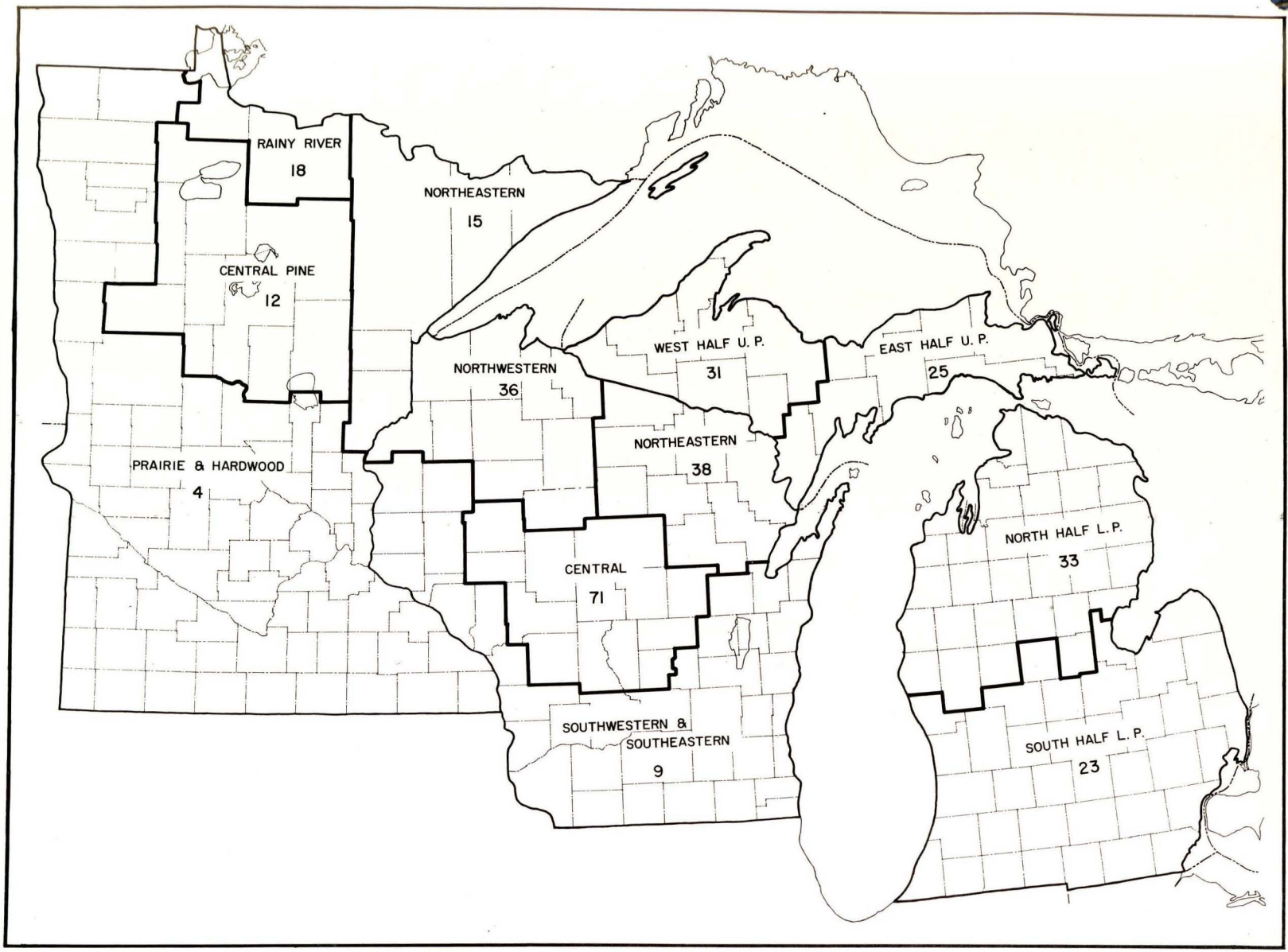
As in all recent years, aspen was first, followed by spruce and balsam fir. Eight Lake States mills procured wood chips and unchipped mill residues in 1962, compared to only 4 mills in 1961.

Michigan still the leading producer. — Michigan, with a pulpwood harvest of 1,223,293 cords, was again the Lake States leading producer. The harvest was 11 percent larger than the previous year and 60 percent larger than 10 years ago. About 677,000 cords (55 percent) were delivered to Michigan mills, 540,000 cords (44 percent) were exported to Wisconsin, and 6,000 cords (1 percent) went to the Central States.

Aspen, pine, and hard hardwoods were the species most heavily cut in Michigan. The aspen pulpwood harvest amounted to approximately 601,000 cords, an increase of 43,000 cords over the previous year. Menominee, Alcona, and Dickinson Counties yielded the largest cuts. Pine production amounted to 184,000 cords, an increase of 28,000



Cords of pulpwood cut per 1,000 acres of stocked commercial forest land in the principal pulpwood-producing counties, Lake States, 1962. Cross-hatching shows counties that supplied 100 or more cords of pulpwood per 1,000 acres of stocked commercial forest land. The heavy lines delineate the boundaries of the Forest Survey districts in each State. The asterisk (*) indicates a pulpwood production of less than 5 cords per 1,000 acres.



Cords of pulpwood cut per thousand cords of merchantable volume in principal pulpwood species, by Forest Survey district, 1962. Note: Minnesota figures are not comparable to those published in previous pulpwood reports. They are based on new findings from the third Minnesota Forest Survey which show substantially increased timber volumes.

cords. Oscoda, Crawford, Luce, and Marquette Counties yielded the largest cuts of pine. The cut of pulpwood from dense hardwood species amounted to 144,000 cords, up about one-third over the previous year. Ontonagon, Manistee, and Houghton Counties furnished the largest amounts.

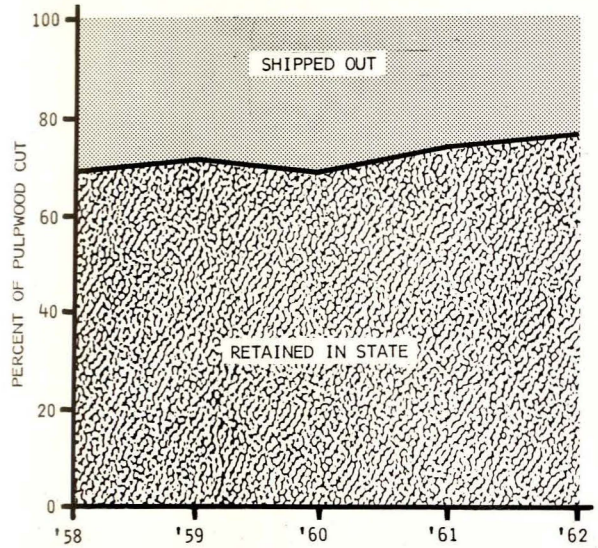
Wisconsin's annual output continues steady climb. — The Wisconsin pulpwood cut amounted to 1,140,347 cords in 1962. The harvest was up 6 percent from the previous year and nearly double that of 10 years ago. Nearly all of the pulpwood cut in the State went to Wisconsin mills; exports to Minnesota, Michigan, and the Central States amounted to only 27,000 cords. Wisconsin has never been a large exporter of pulpwood. Only during the past few years have exports gained, mainly because of larger deliveries of hardwood roundwood to Central States mills. Most of this wood was cut in Grant, Lafayette, and Monroe Counties.

Aspen, hard hardwoods, and pine made up most of the pulpwood harvest in 1962. Aspen was the leading species with approximately 572,000 cords, an increase of 42,000 cords over the previous year. Oneida, Price, and Forest Counties yielded the largest cuts of aspen. Dense hardwoods amounted to 188,000 cords, slightly less than the previous year. Marathon, Taylor, and Price Counties furnished the largest amounts. Pine production was also 188,000 cords, an increase of 34,000 over the previous year. Douglas, Jackson, and Washburn Counties yielded the largest cuts of pine.

Minnesota's annual production has leveled off at about 1 million cords. — For the seventh consecutive year Minnesota's annual pulpwood output has approximated one million cords. The 1962 harvest was 978,733 cords, 1 percent larger than the previous year and 4 percent larger than that of 10 years ago. Although Minnesota's pulpwood output has not followed the strong upward trend so evident in Michigan and Wisconsin, local plant facilities have been expanded and as a result more of Minnesota's pulpwood cut has been delivered to Minnesota mills. Station records show progessively larger amounts of local pulpwood being retained in the State each year. In 1962 about 753,000 cords, 77 percent of the total, were delivered to state mills. Exports to Wisconsin, Michigan, and Canada amounted to 226,000 cords, 12 percent less than the previous year.

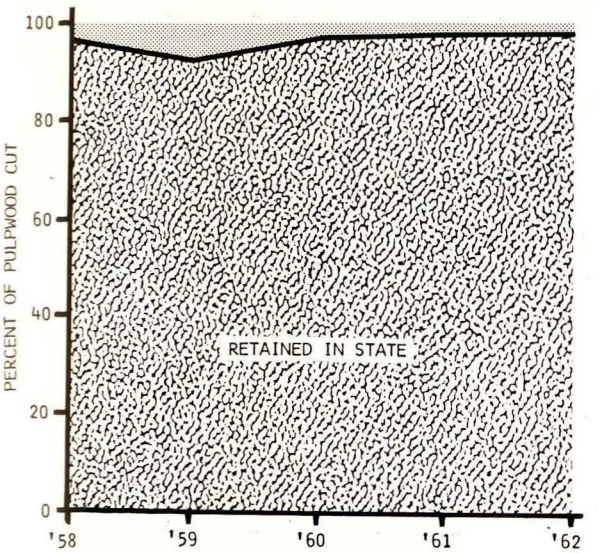
Aspen, spruce, and pine were the species most heavily cut in 1962. The aspen cut amounted to approximately 406,000 cords, an increase of 37,000 cords over the 1961 output. St. Louis, Koochiching, and Itasca Counties yielded the largest cuts. Spruce production was 217,000 cords, a decrease of about 10 percent. Koochiching, St. Louis, and Cook Counties were the leaders. The pine output amounted to 201,000 cords, practically the same as the previous year. St. Louis, Lake, and Cook Counties yielded the largest cuts of pine.

PULPWOOD PRODUCTION BY STATE OF ORIGIN AND DESTINATION PAST FIVE YEARS



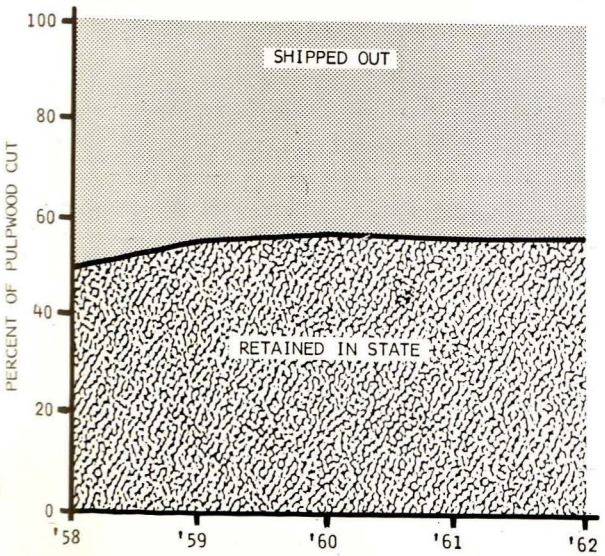
MINNESOTA

Year	Total cut	Destination of pulpwood			
		Minn.	Wis.	Mich.	Other
	(Thousand standard cords)				
1958	903	626	267	7	3
1959	994	721	251	7	15
1960	1,048	711	308	-	29
1961	968	712	240	-	16
1962	979	753	216	1	9
5-year average	978	705	256	3	14



WISCONSIN

Year	Total cut	Destination of pulpwood			
		Minn.	Wis.	Mich.	Other
	(Thousand standard cords)				
1958	828	14	811	-	3
1959	972	21	915	3	33
1960	1,052	19	1,008	-	25
1961	1,078	14	1,050	1	13
1962	1,140	15	1,114	1	10
5-year average	1,014	17	980	1	17



MICHIGAN

Year	Total cut	Destination of pulpwood			
		Minn.	Wis.	Mich.	Other
	(Thousand standard cords)				
1958	900	-	442	458	-
1959	1,053	-	447	603	3
1960	1,237	-	510	727	-
1961	1,106	-	464	628	14
1962	1,223	-	540	677	6
5-year average	1,104	-	481	569	3

PULPWOOD PRODUCTION BY FOREST SURVEY DISTRICTS AND DESTINATION BY STATES, 1962

(Thousand standard cords, roughwood basis)

MINNESOTA

District	Total cut	Destination of pulpwood			
		Minnesota	Wisconsin	Michigan	Other
Northeastern	458	280	174	1	3
Central Pine	305	266	39	-	-
Rainy River	200	191	3	-	6
Hardwood & Prairie	16	16	-	-	-
Total	979	753	216	1	9

WISCONSIN

District	Total cut	Destination of pulpwood			
		Minnesota	Wisconsin	Michigan	Other
Northeastern	466	-	465	1	-
Northwestern	443	15	428	-	-
Central	211	-	208	-	3
Southeastern & Southwestern	20	-	13	-	7
Total	1,140	15	1,114	1	10

MICHIGAN

District	Total cut	Destination of pulpwood			
		Minnesota	Wisconsin	Michigan	Other
E. ½ Up. Pen.	278	-	211	67	-
W. ½ Up. Pen.	426	-	329	91	6
N. ½ Low. Pen.	486	-	-	486	-
S. ½ Low. Pen.	33	-	-	33	-
Total	1,223	-	540	677	6

PULPWOOD PRODUCTION BY SPECIES, STATE, AND FOREST SURVEY DISTRICTS FOR SPECIFIED YEARS

(Thousand standard cords, roughwood basis)

State and district	ASPEN Annual production				State and district	BALSAM FIR Annual production			
	1959	1960	1961	1962		1959	1960	1961	1962
MINNESOTA:					MINNESOTA:				
Northeastern	119	150	152	170	Northeastern	59	62	47	38
Central Pine	169	158	137	146	Central Pine	40	49	35	40
Rainy River	86	77	74	83	Rainy River	30	33	29	32
Prairie & Hardwood	7	7	6	7	Prairie & Hardwood	1	1	*	-
Total	381	392	369	406	Total	130	145	111	110
WISCONSIN:					WISCONSIN:				
Northeastern	206	281	280	301	Northeastern	31	25	30	24
Northwestern	172	212	203	210	Northwestern	20	24	30	22
Central	51	45	46	54	Central	1	1	1	*
Southeastern & Southwestern	2	2	1	7	Southeastern & Southwestern	*	-	*	*
Total	431	540	530	572	Total	52	50	61	46
MICHIGAN:					MICHIGAN:				
E. ½ Up. Pen.	94	111	91	96	E. ½ Up. Pen.	57	73	58	56
W. ½ Up. Pen.	142	173	168	174	W. ½ Up. Pen.	45	55	48	44
N. ½ Low. Pen.	263	355	280	305	N. ½ Low. Pen.	7	7	9	4
S. ½ Low. Pen.	24	30	19	26	S. ½ Low. Pen.	-	-	-	-
Total	523	669	558	601	Total	109	135	115	104
Lake States	1,335	1,601	1,457	1,579	Lake States	291	330	287	260

* Less than 500 cords.

(Cont'd on next page)

(Pulpwood production cont'd.)

(Thousand standard cords, roughwood basis)

State and district	JACK PINE[1/] Annual production				State and district	SPRUCE Annual production			
	1959	1960	1961	1962		1959	1960	1961	1962
MINNESOTA:					MINNESOTA:				
Northeastern	102	138	127	126	Northeastern	108	146	131	114
Central Pine	121	64	56	53	Central Pine	45	42	35	40
Rainy River	8	13	13	13	Rainy River	65	67	70	63
Prairie & Hardwood	8	10	9	9	Prairie & Hardwood	2	1	4	*
Total	239	225	205	201	Total	220	256	240	217
WISCONSIN:					WISCONSIN:				
Northeastern	47	38	42	42	Northeastern	13	11	13	8
Northwestern	56	53	35	71	Northwestern	7	6	10	6
Central	84	29	73	70	Central	1	1	*	1
Southeastern & Southwestern	-	4	4	5	Southeastern & Southwestern	-	-	-	*
Total	187	124	154	188	Total	21	18	23	15
MICHIGAN:					MICHIGAN:				
E. ½ Up. Pen.	59	51	38	61	E. ½ Up. Pen.	37	52	45	41
W. ½ Up. Pen.	33	22	13	29	W. ½ Up. Pen.	39	49	44	41
N. ½ Low. Pen.	104	114	103	93	N. ½ Low. Pen.	7	7	7	4
S. ½ Low. Pen.	1	1	2	1	S. ½ Low. Pen.	-	-	-	-
Total	197	188	156	184	Total	83	108	96	86
Lake States	623	537	515	573	Lake States	324	382	359	318

1/ Includes small quantity of red and white pine.

(Cont'd on next page)

* Less than 500 cords.

(Pulpwood production cont'd.)

(Thousand standard cords, roughwood basis)

State and district	BIRCH Annual production				State and district	HEMLOCK Annual production			
	1959	1960	1961	1962		1959	1960	1961	1962
MINNESOTA:					MINNESOTA:				
Northeastern	1	*	*	*	Northeastern	-	-	-	-
Central Pine	*	1	1	2	Central Pine	-	-	-	-
Rainy River	-	-	-	-	Rainy River	-	-	-	-
Prairie & Hardwood	-	-	-	-	Prairie & Hardwood	-	-	-	-
Total	1	1	1	2	Total	-	-	-	-
WISCONSIN:					WISCONSIN:				
Northeastern	4	4	12	4	Northeastern	18	17	18	21
Northwestern	22	19	21	31	Northwestern	26	27	25	18
Central	*	4	1	6	Central	5	8	4	3
Southeastern & Southwestern	-	-	*	-	Southeastern & Southwestern	-	-	*	*
Total	26	27	34	41	Total	49	52	47	42
MICHIGAN:					MICHIGAN:				
E. ½ Up. Pen.	3	3	6	5	E. ½ Up. Pen.	*	3	2	3
W. ½ Up. Pen.	1	2	5	3	W. ½ Up. Pen.	39	43	42	54
N. ½ Low. Pen.	-	4	5	13	N. ½ Low. Pen.	-	-	-	-
S. ½ Low. Pen.	-	-	-	-	S. ½ Low. Pen.	-	-	-	-
Total	4	9	16	21	Total	39	46	44	57
Lake States	31	37	51	64	Lake States	88	98	91	99

* Less than 500 cords.

(Cont'd on next page)

(Pulpwood production cont'd.)

(Thousand standard cords, roughwood basis)

State and district	TAMARACK Annual production				State and district	MISC. HARDWOODS Annual production			
	1959	1960	1961	1962		1959	1960	1961	1962
MINNESOTA:					MINNESOTA:				
Northeastern	2	5	3	6	Northeastern	1	1	1	4
Central Pine	6	11	5	3	Central Pine	-	*	21	21
Rainy River	3	3	*	-	Rainy River	11	9	9	9
Prairie & Hardwood	-	-	*	-	Prairie & Hardwood	-	-	3	*
Total	11	19	8	9	Total	12	10	34	34
WISCONSIN:					WISCONSIN:				
Northeastern	4	4	2	2	Northeastern	53	73	52	46
Northwestern	3	2	5	4	Northwestern	58	63	67	67
Central	-	*	*	*	Central	47	61	74	69
Southeastern & Southwestern	-	-	-	*	Southeastern & Southwestern	1	7	8	6
Total	7	6	7	6	Total	159	204	201	188
MICHIGAN:					MICHIGAN:				
E. ½ Up. Pen.	*	2	2	3	E. ½ Up. Pen.	4	4	2	13
W. ½ Up. Pen.	3	3	2	1	W. ½ Up. Pen.	51	43	37	58
N. ½ Low. Pen.	-	-	-	-	N. ½ Low. Pen.	28	16	46	67
S. ½ Low. Pen.	-	-	-	-	S. ½ Low. Pen.	7	12	11	6
Total	3	5	4	4	Total	90	75	96	144
Lake States	21	30	19	19	Lake States	261	289	331	366

* Less than 500 cords.

(Cont'd on next page)

(Pulpwood production cont'd.)

(Thousand standard cords, roughwood basis)

State and district	RESIDUE & CHIPS[1/] Annual production				State and district	ALL SPECIES[2/] Annual production			
	1959	1960	1961	1962		1959	1960	1961	1962
MINNESOTA:					MINNESOTA:				
Northeastern	-	-	-	-	Northeastern	392	502	461	458
Central Pine	-	-	-	-	Central Pine	381	325	290	305
Rainy River	-	-	-	-	Rainy River	203	202	195	200
Prairie & Hardwood	-	-	-	*	Prairie & Hardwood	18	19	22	16
Total	-	-	-	*	Total	994	1,048	968	979
WISCONSIN:					WISCONSIN:				
Northeastern	18	13	9	18	Northeastern	394	466	458	466
Northwestern	13	10	7	14	Northwestern	377	416	403	443
Central	7	6	4	8	Central	196	155	203	211
Southeastern & Southwestern	2	2	1	2	Southeastern & Southwestern	5	15	14	20
Total	40	31	21	42	Total	972	1,052	1,078	1,140
MICHIGAN:					MICHIGAN:				
E. ½ Up. Pen.	-	-	-	*	E. ½ Up. Pen.	254	299	249	278
W. ½ Up. Pen.	5	2	21	22	W. ½ Up. Pen.	358	392	375	426
N. ½ Low. Pen.	-	-	-	-	N. ½ Low. Pen.	409	503	450	486
S. ½ Low. Pen.	-	-	-	-	S. ½ Low. Pen.	32	43	32	33
Total	5	2	21	22	Total	1,053	1,237	1,106	1,223
Lake States	45	33	42	64	Lake States	3,019	3,337	3,152	3,342

1/ Not reported by district. Prorated on basis of most recent lumber output figures.

2/ Including residues and chips.

* Less than 500 cords.

PULPWOOD PRODUCTION BY COUNTY AND SPECIES, 1962

WISCONSIN

(Thousand standard cords, roughwood basis)

District & county[1]	All species	Aspen	Balsam	Birch	Hemlock	Pine	Spruce	Tamarack	Misc. hdwds.	Residue & chips[2]
NORTHEASTERN:										
Florence	25	18	2	*	3	*	1	-	1	-
Forest	65	46	6	*	7	2	1	*	3	-
Langlade	48	33	3	*	1	*	1	*	10	-
Lincoln	46	30	1	*	1	8	*	*	6	-
Marinette	65	41	4	*	2	9	1	1	7	-
Oconto	26	19	1	-	1	2	1	-	2	-
Oneida	106	69	5	2	3	14	2	1	10	-
Shawano	26	22	1	*	1	*	*	-	2	-
Vilas	41	23	1	2	2	7	1	*	5	-
Total	466	301	24	4	21	42	8	2	46	18
NORTHWESTERN:										
Ashland	43	17	9	3	3	1	1	1	8	-
Bayfield	59	37	1	8	2	10	*	*	1	-
Burnett	15	1	-	*	-	14	*	*	*	-
Douglas	55	23	1	1	*	24	2	1	3	-
Iron	26	18	2	1	3	-	1	*	1	-
Price	88	49	5	9	4	*	1	*	20	-
Rusk	20	10	*	*	1	-	*	*	9	-
Sawyer	28	14	2	5	2	2	*	1	2	-
Taylor	63	33	1	3	3	-	1	*	22	-
Washburn	32	8	1	1	*	20	*	1	1	-
Total	443	210	22	31	18	71	6	4	67	14
CENTRAL:										
Adams	27	2	-	-	-	12	-	-	13	-
Chippewa	9	9	-	-	*	*	-	*	*	-
Clark	12	8	-	*	1	*	*	-	3	-
Eau Claire	4	2	-	*	-	2	-	-	-	-
Jackson	28	2	-	-	-	24	-	*	2	-
Juneau	20	4	-	-	-	14	-	-	2	-
Marathon	50	17	*	5	1	1	1	*	25	-
Marquette	2	*	-	-	-	*	-	-	2	-
Monroe	10	*	-	-	-	9	-	-	1	-
Portage	12	2	*	1	*	2	*	-	7	-
Waupaca	5	4	*	*	1	*	*	-	*	-
Waushara	1	*	-	-	-	*	-	-	1	-
Wood	23	4	-	*	*	6	-	-	13	-
Total	211	54	*	6	3	70	1	*	69	8

WISCONSIN (cont'd)

(Thousand standard cords, roughwood basis)

District & county 1/	All species	Aspen	Balsam	Birch	Hemlock	Pine	Spruce	Tamarack	Misc. hdwds.	Residue & chips 2/
SOUTHWESTERN:										
Dunn	1	*	-	-	-	1	-	-	-	-
Grant	2	-	-	-	-	1	-	-	1	-
Iowa	1	-	-	-	-	*	-	-	1	-
LaFayette	3	-	-	-	-	1	-	-	2	-
LaCrosse	*	-	-	-	-	*	-	-	-	-
Polk	2	*	-	-	-	2	-	*	-	-
Richland	*	-	-	-	-	*	-	-	-	-
Sauk	*	*	-	-	-	-	-	-	*	-
Trempealeau	*	-	-	-	-	*	-	-	-	-
Total	11	*	-	-	-	5	-	*	4	2
SOUTHEASTERN:										
Brown	1	1	*	-	*	*	*	-	*	-
Columbia	1	*	-	-	*	*	-	-	1	-
Door	*	-	*	-	-	-	-	-	*	-
Green Lake	*	-	-	-	-	*	-	-	-	-
Kewaunee	*	*	*	-	-	-	-	-	*	-
Outagamie	7	6	*	-	-	-	*	-	1	-
Total	9	7	*	-	*	*	*	-	2	*
State total	1,140	572	46	41	42	188	15	6	188	42

1/ Includes only those counties that supplied pulpwood in 1962.

2/ County figures are not available.

* Less than 500 cords.

MICHIGAN

(Thousand standard cords, roughwood basis)

District[1] & county	All species	Aspen	Balsam	Birch	Hemlock	Pine	Spruce	Tamarack	Misc. hdwds.	Residue[2] & chips
E. ½ UP. PEN.:										
Alger	18	1	2	*	*	12	3	*	-	-
Chippewa	24	2	4	1	-	11	5	1	-	-
Delta	54	24	10	2	1	7	3	*	7	-
Luce	37	1	4	1	*	21	9	1	-	-
Mackinac	17	4	8	*	*	2	3	*	-	-
Menominee	87	59	14	*	1	1	7	*	5	-
Schoolcraft	41	5	14	1	1	7	11	1	1	-
Total	278	96	56	5	3	61	41	3	13	-
W. ½ UP. PEN.:										
Baraga	58	32	7	*	1	3	10	*	5	-
Dickinson	60	38	9	1	1	1	6	1	3	-
Gogebic	49	22	3	*	21	*	1	*	2	-
Houghton	45	11	2	*	15	3	2	*	12	-
Iron	45	27	5	*	4	*	4	*	5	-
Keweenaw	11	*	6	-	-	-	5	-	-	-
Marquette	67	21	11	2	*	21	12	*	-	-
Ontonagon	69	23	1	*	12	1	1	*	31	-
Total	426	174	44	3	54	29	41	1	58	22
N. ½ LOW. PEN.:										
Alcona	48	39	*	2	-	1	*	-	6	-
Alpena	12	7	1	1	-	*	1	-	2	-
Antrim	1	1	-	*	-	*	-	-	*	-
Arenac	1	1	-	*	-	*	-	-	*	-
Benzie	7	5	-	*	-	*	-	-	2	-
Charlevoix	2	2	-	-	-	-	-	-	-	-
Cheboygan	9	6	1	*	-	1	1	-	*	-
Clare	22	22	*	*	-	-	*	-	*	-
Crawford	29	6	*	1	-	21	*	-	1	-
Emmett	1	1	-	*	-	-	-	-	*	-
Gladwin	5	5	-	*	-	*	-	-	*	-
Grand Traverse	6	4	-	*	-	2	-	-	*	-
Iosco	22	9	*	1	-	11	*	-	1	-
Kalkaska	3	2	*	-	-	1	*	-	-	-
Lake	26	10	*	1	-	10	*	-	5	-
Leelanau	*	*	-	-	-	*	-	-	-	-
Manistee	32	10	-	*	-	1	-	-	21	-
Mason	17	9	-	*	-	2	-	-	6	-
Mecosta	15	14	-	*	-	*	-	-	1	-
Midland	6	6	-	*	-	-	-	-	-	-
Missaukee	11	5	*	1	-	4	*	-	1	-
Montmorency	43	29	1	1	-	6	1	-	5	-
Newaygo	25	23	-	*	-	*	-	-	2	-
Oceana	7	7	-	*	-	*	-	-	*	-
Ogemaw	8	5	*	*	-	3	*	-	*	-
Osceola	21	16	-	1	-	*	-	-	4	-
Oscoda	44	19	*	1	-	23	*	-	1	-
Otsego	3	2	-	*	-	1	-	-	*	-
Presque Isle	20	12	1	2	-	1	1	-	3	-
Roscommon	22	17	*	1	-	2	*	-	2	-
Wexford	18	11	-	*	-	3	-	-	4	-
Total	486	305	4	13	-	93	4	-	67	-

MICHIGAN (cont'd.)

(Thousand standard cords, roughwood basis)

District & county[1/]	All species	Aspen	Balsam	Birch	Hemlock	Pine	Spruce	Tamarack	Misc. hdwds.	Residue & chips[2/]
S. ½ LOW. PEN.:										
Allegan	3	1	-	-	-	*	-	-	2	-
Barry	4	2	-	-	-	*	-	-	2	-
Berrien	1	*	-	-	-	-	-	-	1	-
Eaton	*	-	-	-	-	-	-	-	*	-
Gratiot	1	1	-	-	-	-	-	-	*	-
Isabella	11	11	-	-	-	*	-	-	*	-
Kalamazoo	*	*	-	-	-	*	-	-	*	-
Kent	1	1	-	-	-	-	-	-	*	-
Lapeer	4	3	-	-	-	-	-	-	1	-
Montcalm	4	4	-	-	-	*	-	-	-	-
Muskegon	*	*	-	-	-	*	-	-	-	-
Ottawa	1	*	-	-	-	1	-	-	-	-
Saginaw	*	*	-	-	-	-	-	-	-	-
St. Clair	1	1	-	-	-	-	-	-	*	-
St. Joseph	*	*	-	-	-	-	-	-	*	-
Sanilac	*	*	-	-	-	-	-	-	-	-
Tuscola	1	1	-	-	-	-	-	-	*	-
Van Buren	1	1	-	-	-	-	-	-	*	-
Total	33	26	-	-	-	1	-	-	6	-
State total	1,223	601	104	21	57	184	86	4	144	22

1/ Includes only those counties that supplied pulpwood in 1962.

2/ Residue and chips were used for pulpwood only in the western half of the Upper Peninsula. Data by counties for this area are not available.

* Less than 500 cords.

MINNESOTA

(Thousand standard cords, roughwood basis)

District & county[1/]	All species	Aspen	Balsam	Birch	Pine	Spruce	Tamarack	Misc. hdwds.	Residue & chips
NORTHEASTERN:									
Carlton	34	29	2	-	3	*	-	-	-
Cook	65	*	4	-	17	44	-	-	-
Lake	82	11	2	-	44	25	-	-	-
Pine	17	12	*	-	2	1	*	2	-
St. Louis	260	118	30	*	60	44	6	2	-
Total	458	170	38	*	126	114	6	4	-
CENTRAL PINE:									
Aitkin	35	28	3	-	2	2	*	*	-
Becker	5	3	1	-	1	*	-	-	-
Beltrami	58	27	8	1	9	9	1	3	-
Cass	39	14	5	1	11	3	1	4	-
Clearwater	44	25	3	*	2	2	*	12	-
Crow Wing	9	*	*	-	8	1	-	-	-
Hubbard	25	17	1	*	5	2	*	1	-
Itasca	87	32	19	*	13	21	1	1	-
Wadena	2	*	-	-	2	*	-	-	-
Total	305	146	40	2	53	40	3	21	-
RAINY RIVER:									
Koochiching	170	75	30	-	6	50	-	9	-
Lake of the Woods	30	8	2	-	7	13	-	*	-
Total	200	83	32	-	13	63	-	9	-
HARDWOOD:									
Mille Lacs	*	-	-	-	-	-	-	*	-
Morrison	1	-	-	-	1	*	-	-	-
Scott	*	-	-	-	-	*	-	-	-
Todd	1	-	-	-	1	-	-	-	-
Total	2	-	-	-	2	*	-	*	-
PRAIRIE:									
Mahnomen	3	3	-	-	-	*	-	-	-
Polk	2	2	-	-	-	-	-	-	-
Roseau	9	2	-	-	7	*	-	-	-
Wilkin	*	-	-	-	*	-	-	-	-
Total	14	7	-	-	7	*	-	-	-
State total	979	406	110	2	201	217	9	34	-

1/ Includes only those counties that supplied pulpwood in 1962.

* Less than 500 cords.

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